



SEQUENCE LISTING

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Carballo-Jane, Ester
Lai, Wi S.

<120> TTP-RELATED ZINC FINGER DOMAINS AND
METHODS OF USE

<130> 14014.0349U2

<140> 10/049,586

<141> 2002-02-12

<150> PCT/US00/22199

<151> 2000-08-14

<150> 60/148,810

<151> 1999-08-13

<160> 48

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 326

<212> PRT

<213> Homo sapiens

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Gly	Ser	Ser	Gly	Pro	Trp	Ser	Leu	Ser	Pro	Ser	Asp	Ser	Ser	Pro	Ser
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Gly	Val	Thr	Ser	Arg	Leu	Pro	Gly	Arg	Ser	Thr	Ser	Leu	Val	Glu	Gly
	50				55					60					
Arg	Ser	Cys	Gly	Trp	Val	Pro	Pro	Pro	Pro	Gly	Phe	Ala	Pro	Leu	Ala
65					70					75				80	
Pro	Arg	Leu	Gly	Pro	Glu	Leu	Ser	Pro	Ser	Pro	Thr	Ser	Pro	Thr	Ala
			85					90					95		
Thr	Ser	Thr	Thr	Pro	Ser	Arg	Tyr	Lys	Thr	Glu	Leu	Cys	Arg	Thr	Phe
		100						105					110		
Ser	Glu	Ser	Gly	Arg	Cys	Arg	Tyr	Gly	Ala	Lys	Cys	Gln	Phe	Ala	His
	115						120					125			
Gly	Leu	Gly	Glu	Leu	Arg	Gln	Ala	Asn	Arg	His	Pro	Lys	Tyr	Lys	Thr
	130				135						140				
Glu	Leu	Cys	His	Lys	Phe	Tyr	Leu	Gln	Gly	Arg	Cys	Pro	Tyr	Gly	Ser
145				150						155				160	
Arg	Cys	His	Phe	Ile	His	Asn	Pro	Ser	Glu	Asp	Leu	Ala	Ala	Pro	Gly
			165						170					175	
His	Pro	Pro	Val	Leu	Arg	Gln	Ser	Ile	Ser	Phe	Ser	Gly	Leu	Pro	Ser
		180						185					190		
Gly	Arg	Arg	Thr	Ser	Pro	Pro	Pro	Pro	Gly	Leu	Ala	Gly	Pro	Ser	Leu
	195					200						205			
Ser	Ser	Ser	Ser	Phe	Ser	Pro	Ser	Ser	Ser	Pro	Pro	Pro	Pro	Gly	Asp
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Leu	Pro	Leu	Ser	Pro	Ser	Ala	Phe	Ser	Ala	Ala	Pro	Gly	Thr	Pro	Leu
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			20					25					30			
Gly	Cys	Leu	Leu	Asp	Arg	Lys	Ala	Val	Gly	Thr	Pro	Ala	Gly	Gly	Gly	
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Phe	Pro	Arg	Arg	His	Ser	Val	Thr	Leu	Pro	Ser	Ser	Lys	Phe	Arg	Gln	
	50					55					60					
Asn	Gln	Leu	Leu	Ser	Ser	Leu	Lys	Gly	Glu	Pro	Ala	Pro	Ala	Leu	Ser	
65					70					75					80	
Ser	Arg	Asp	Ser	Arg	Phe	Arg	Asp	Arg	Ser	Phe	Ser	Glu	Gly	Gly	Glu	
			85					90					95			
Arg	Leu	Leu	Pro	Thr	Gln	Lys	Gln	Pro	Gly	Gly	Gly	Gln	Val	Asn	Ser	
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Ser	Arg	Tyr	Lys	Thr	Glu	Leu	Cys	Arg	Pro	Phe	Glu	Glu	Asn	Gly	Ala	
		115					120					125				
Cys	Lys	Tyr	Gly	Asp	Lys	Cys	Gln	Phe	Ala	His	Gly	Ile	His	Glu	Leu	
	130					135					140					
Arg	Ser	Leu	Thr	Arg	His	Pro	Lys	Tyr	Lys	Thr	Glu	Leu	Cys	Arg	Thr	
145					150					155					160	
Phe	His	Thr	Ile	Gly	Phe	Cys	Pro	Tyr	Gly	Pro	Arg	Cys	His	Phe	Ile	
			165					170					175			
His	Asn	Ala	Glu	Arg	Arg	Ala	Leu	Ala	Gly	Ala	Arg	Asp	Leu	Ser		
			180					185				190				
Ala	Asp	Arg	Pro	Arg	Leu	Gln	His	Ser	Phe	Ser	Phe	Ala	Gly	Phe	Pro	
		195					200					205				
Ser	Ala	Ala	Ala	Thr	Ala	Ala	Ala	Thr	Gly	Leu	Leu	Asp	Ser	Pro	Thr	
	210					215					220					
Ser	Ile	Thr	Pro	Pro	Pro	Ile	Leu	Ser	Ala	Asp	Asp	Leu	Leu	Gly	Ser	
225					230					235					240	
Pro	Thr	Leu	Pro	Asp	Gly	Thr	Asn	Asn	Pro	Phe	Ala	Phe	Ser	Ser	Gln	
			245						250				255			
Glu	Leu	Ala	Ser	Leu	Phe	Ala	Pro	Ser	Met	Gly	Leu	Pro	Gly	Gly	Gly	
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Ser	Pro	Thr	Thr	Phe	Leu	Phe	Arg	Pro	Met	Ser	Glu	Ser	Pro	His	Met	
		275					280					285				
Phe	Asp	Ser	Pro	Pro	Ser	Pro	Gln	Asp	Ser	Leu	Ser	Asp	Gln	Glu	Gly	
	290					295					300					
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Asp Asp

<210> 3

<211> 492

<212> PRT

<213> Homo sapiens

<400> 3

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 20          25          30
Lys Lys Ala Val Gly Thr Pro Val Ala Ala Ala Pro Ser Ser Gly Phe
 35          40          45
Ala Pro Gly Phe Leu Arg Arg His Ser Ala Ser Asn Leu His Ala Leu
 50          55          60
Ala His Pro Ala Pro Ser Pro Gly Ser Cys Ser Pro Lys Phe Pro Gly
 65          70          75          80
Ala Ala Asn Gly Ser Ser Cys Gly Ser Ala Ala Ala Gly Gly Pro Thr
 85          90          95
Ser Tyr Gly Thr Leu Lys Glu Pro Ser Gly Gly Gly Gly Thr Ala Leu
100          105          110
Leu Asn Lys Glu Asn Lys Phe Arg Asp Arg Ser Phe Ser Glu Asn Gly
115          120          125
Asp Arg Ser Gln His Leu Leu His Leu Gln Gln Gln Gln Lys Gly Gly
130          135          140
Gly Gly Ser Gln Ile Asn Ser Thr Arg Tyr Lys Thr Glu Leu Cys Arg
145          150          155          160
Pro Phe Glu Glu Ser Gly Thr Cys Lys Tyr Gly Glu Lys Cys Gln Phe
165          170          175
Ala His Gly Phe His Glu Leu Arg Ser Leu Thr Arg His Pro Lys Tyr
180          185          190
Lys Thr Glu Leu Cys Arg Thr Phe His Thr Ile Gly Phe Cys Pro Tyr
195          200          205
Gly Pro Arg Cys His Phe Ile His Asn Ala Asp Glu Arg Arg Pro Ala
210          215          220
Pro Ser Gly Gly Ala Ser Gly Asp Leu Arg Ala Phe Gly Thr Arg Asp
225          230          235          240
Ala Leu His Leu Gly Phe Pro Arg Glu Pro Arg Pro Lys Leu His His
245          250          255
Ser Leu Ser Phe Ser Gly Phe Pro Ser Gly His His Gln Pro Pro Gly
260          265          270
Gly Leu Glu Ser Pro Leu Leu Leu Asp Ser Pro Thr Ser Arg Thr Pro
275          280          285
Pro Pro Pro Ser Cys Ser Ser Ala Ser Ser Cys Ser Ser Ser Ala Ser
290          295          300
Ser Cys Ser Ser Ala Ser Ala Ala Ser Thr Pro Ser Gly Thr Pro Thr
305          310          315          320
Cys Cys Ala Ser Ala Ala Ala Leu Arg Leu Leu Tyr Gly Thr Gly
325          330          335
Gly Ala Glu Asp Leu Leu Ala Pro Gly Ala Pro Cys Ala Ala Cys Ser
340          345          350
Ser Ala Ser Cys Ala Asn Asn Ala Phe Ala Phe Gly Pro Glu Leu Ser
355          360          365
Ser Leu Ile Thr Pro Leu Ala Ile Gln Thr His Asn Phe Ala Ala Val
370          375          380
Ala Ala Ala Ala Tyr Tyr Arg Ser Gln Gln Gln Gln Gln Gln Gly
385          390          395          400
Leu Ala Pro Pro Ala Gln Pro Pro Ala Pro Pro Ser Ala Thr Leu Pro
405          410          415

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Ala Gly Ala Ala Ala Pro Pro Ser Pro Pro Phe Ser Phe Gln Leu Pro
 420 425 430
 Arg Arg Leu Ser Asp Ser Pro Val Phe Asp Ala Pro Pro Ser Pro Pro
 435 440 445
 Asp Ser Leu Ser Asp Arg Asp Ser Tyr Leu Ser Gly Ser Leu Ser Ser
 450 455 460
 Gly Ser Leu Ser Gly Ser Glu Ser Pro Ser Leu Asp Pro Gly Arg Arg
 465 470 475 480
 Leu Pro Ile Phe Ser Arg Leu Ser Ile Ser Asp Asp
 485 490

<210> 4

<211> 276

<212> PRT

<213> *Xenopus laevis*

<400> 4

Met Glu Ile Ser Asn Asp Ser Leu Asp Leu Phe Ser Ser Phe Phe Pro
 1 5 10 15
 Gln Leu Ser Pro Pro Ala Asp Pro Glu Thr Pro Leu Leu Pro Ser Phe
 20 25 30
 Ser Ala Pro Pro Lys His Leu Ser Ser Ser Leu Arg Tyr Lys Thr
 35 40 45
 Glu Leu Cys Ser Arg Tyr Ala Glu Ser Gly Phe Cys Ala Tyr Arg Asn
 50 55 60
 Arg Cys Gln Phe Ala His Gly Leu Ser Glu Leu Arg Pro Pro Val Gln
 65 70 75 80
 His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Ser Phe His Val Leu Gly
 85 90 95
 Thr Cys Asn Tyr Gly Leu Arg Cys Leu Phe Ile His Ser Pro Gln Glu
 100 105 110
 Arg Arg Glu Pro Pro Val Leu Pro Asp Asn Leu Ser Leu Pro Pro Arg
 115 120 125
 Arg Tyr Gly Gly Pro Tyr Arg Glu Arg Cys Arg Leu Trp Ser Ala Pro
 130 135 140
 Gly Gly Cys Pro Tyr Gly Ala Arg Cys His Phe Gln His Pro Lys Ser
 145 150 155 160
 Ala Arg Glu Thr Cys Arg His Phe Ala Ala Leu Gly Asp Cys Pro Tyr
 165 170 175
 Gly Ala Cys Cys His Phe Ser His Ser Pro Pro Leu Asp Arg Trp Gly
 180 185 190
 Ser Gly Thr Lys Asn Ser Ser Gly Ser Leu Ser Pro Ser Asp Pro Asp
 195 200 205
 Ser Asp Pro Asp Thr Pro Val Leu Ser Glu Ser Pro Ala Asn Asn Ala
 210 215 220
 Phe Ser Phe Ser Ser Leu Leu Leu Pro Leu Ala Leu Arg Leu Gln Ile
 225 230 235 240
 Leu Gly Asp Asp Asp Leu Pro Thr Ala Ser Asp Pro Leu Pro Gly Asp
 245 250 255
 Asp Thr Asp Leu Leu Pro Gly Asp Glu Glu Ile Ala Gln Gly Leu Leu
 260 265 270
 Ser Val Leu Gly
 275

<210> 5

<211> 327

<212> PRT

<213> *Cyprinus carpio*

<400> 5

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Met Phe Glu Thr Ser Thr Asp Asn Leu Phe Leu Phe Pro Thr Glu Gly
1      5      10      15
Leu Asn Glu Ala Phe Phe Pro Glu Glu Gly Leu Ala Ser Gly Ser Leu
20      25      30
Ser Leu Ala Lys Ala Leu Leu Pro Leu Val Glu Ser Pro Ser Pro Pro
35      40      45
Met Thr Pro Trp Leu Cys Ser Thr Arg Tyr Lys Thr Glu Leu Cys Ser
50      55      60
Arg Tyr Ala Glu Thr Gly Thr Cys Lys Tyr Ala Glu Arg Cys Gln Phe
65      70      75      80
Ala His Gly Leu His Asp Leu His Val Pro Ser Arg His Pro Lys Tyr
85      90      95
Lys Thr Glu Leu Cys Arg Thr Tyr His Thr Ala Gly Tyr Cys Val Tyr
100     105     110
Gly Thr Arg Cys Leu Phe Val His Asn Leu Lys Glu Gln Arg Pro Val
115     120     125
Arg Gln Arg Cys Arg Asn Val Pro Cys Arg Thr Phe Arg Ala Phe Gly
130     135     140
Val Cys Pro Phe Gly Thr Arg Cys His Phe Leu His Val Glu Gly Gly
145     150     155     160
Ser Glu Ser Asp Gly Gly Glu Glu Glu Gln Thr Cys Gln Pro Met Ser
165     170     175
Gln Ser Gln Glu Trp Lys Pro Arg Gly Ala Leu Cys Arg Thr Phe Ser
180     185     190
Ala Phe Gly Phe Cys Leu Tyr Gly Thr Arg Cys Arg Phe Gln His Gly
195     200     205
Leu Pro Asn Ser Ile Lys Gly Val Asn Ser Thr His Thr Ser Trp Pro
210     215     220
His Gln Met Thr Asn Arg Gly Ser Leu Ser Pro Val Ser Asp Ala Cys
225     230     235     240
Ser Ser Gln Ser Pro Pro Ser Ser Val Pro Ser Val Cys Val Gly Phe
245     250     255
Ala Val Tyr Pro Glu Gly Ser Gly Pro Val Thr Pro Pro Ser Val Glu
260     265     270
Ala Val Ala Asn Asn Ala Phe Thr Phe Ser Ser Gln His Leu Asn Asp
275     280     285
Leu Leu Leu Pro Leu Ala Leu Arg Leu Gln Gln Leu Glu Asn Val Thr
290     295     300
Asn Ala Gly Pro Gln Asp Ala Val Asp Lys Pro Leu Leu Leu Ser Leu
305     310     315     320
Trp Gln Asp Asp Pro Arg Ser
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<210> 6

<211> 319

<212> PRT

<213> Danio rerio

<400> 6

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Met Phe Glu Thr Ser Gln Asp Asp Leu Phe Leu Phe Pro Thr Glu Gly
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Leu Asn Glu Ala Phe Phe Pro Glu Glu Gly Leu Gly Gly Gly Gly Gly
20      25      30
Gly Leu Ser Leu Ala Glu Ala Leu Pro Leu Val Glu Ser Pro Ser
35      40      45
Pro Pro Met Thr Pro Trp Leu Cys Ser Thr Arg Tyr Lys Thr Glu Leu
50      55      60
Cys Ser Arg Tyr Ala Glu Thr Gly Thr Cys Lys Tyr Ala Glu Arg Cys
65      70      75      80

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Gln Phe Ala His Gly Leu His Asp Leu His Val Pro Ser Arg His Pro
 85 90 95
 Lys Tyr Lys Thr Glu Leu Cys Arg Thr Tyr His Thr Ala Gly Tyr Cys
 100 105 110
 Val Tyr Gly Thr Arg Cys Leu Phe Val His Asn Leu Lys Glu Gln Arg
 115 120 125
 Pro Ile Arg Pro Arg Arg Arg Asn Val Pro Cys Arg Thr Phe Arg Ala
 130 135 140
 Phe Gly Val Cys Pro Phe Gly Asn Arg Cys His Phe Leu His Val Glu
 145 150 155 160
 Gly Gly Ser Glu Ser Asp Gly Ala Glu Glu Glu Gln Thr Trp Gln Pro
 165 170 175
 Pro Ser Gln Ser Gln Glu Trp Lys Pro Arg Gly Ala Leu Cys Arg Thr
 180 185 190
 Phe Ser Ala Phe Gly Phe Cys Leu Tyr Gly Thr Arg Cys Arg Phe Gln
 195 200 205
 His Gly Leu Pro Asn Thr Ile Lys Gly His Asn Ala Asn His Thr Ser
 210 215 220
 Trp Pro Gln Gln Met Thr Asn Gly Gly Ser Ile Ser Pro Ile Ser Asp
 225 230 235 240
 Thr Cys Thr Ser Pro Ser Pro Pro Ser Ser Pro Thr Ser Ala Leu
 245 250 255
 Pro Ser Pro Val Tyr Pro Asp Ser Ser Gly Pro Ile Thr Pro Pro Ser
 260 265 270
 Val Glu Ala Val Ala Asn Asn Ala Phe Thr Phe Ser Ser Gln His Leu
 275 280 285
 Asn Asp Leu Leu Leu Pro Leu Ala Leu Arg Leu Gln Gln Leu Glu Lys
 290 295 300
 Ala Ala Ser Ala Gly Pro Gln Asp Val Leu Asp Lys Pro Leu Leu
 305 310 315

<210> 7

<211> 64

<212> PRT

<213> Rattus norvegicus

<400> 7

Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala Cys
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 Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 8

<211> 64

<212> PRT

<213> Homo sapiens

<400> 8

Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala Cys
 5 10 15
 Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 9
 <211> 64
 <212> PRT
 <213> Mus musculus

<400> 9
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala Cys
 1 5 10 15
 Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 10
 <211> 64
 <212> PRT
 <213> Xenopus laevis

<400> 10
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ser Cys
 1 5 10 15
 Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 11
 <211> 64
 <212> PRT
 <213> Homo sapiens

<400> 11
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Ser Gly Thr Cys
 1 5 10 15
 Lys Tyr Gly Glu Lys Cys Gln Phe Ala His Gly Phe His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

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 <212> PRT
 <213> Mus musculus

<400> 12
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Ser Gly Thr Cys
 1 5 10 15
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 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 13
 <211> 64
 <212> PRT
 <213> *Xenopus laevis*

<400> 13
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala Cys
 1 5 10 15
 Lys Tyr Gly Glu Lys Cys Gln Phe Ala His Gly Phe His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 14
 <211> 64
 <212> PRT
 <213> *Xenopus laevis*

<400> 14
 Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Ser Gly Ala Cys
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 Lys Tyr Gly Glu Lys Cys Gln Phe Ala His Gly Phe His Glu Leu Arg
 20 25 30
 Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Phe
 35 40 45
 His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile His
 50 55 60

<210> 15
 <211> 64
 <212> PRT
 <213> *Homo sapiens*

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 20 25 30
 Gln Ala Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser Arg Cys His Phe Ile His
 50 55 60

<210> 16
 <211> 64
 <212> PRT
 <213> *Bos taurus*

<400> 16
 Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe Ser Glu Ser Gly Arg Cys
 1 5 10 15
 Arg Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Leu Gly Glu Leu Arg
 20 25 30
 Gln Ala Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser Arg Cys His Phe Ile His
 50 55 60

<210> 17
 <211> 64
 <212> PRT
 <213> Mus musculus

<400> 17
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 1 5 10 15
 Arg Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Leu Gly Glu Leu Arg
 20 25 30
 Gln Ala Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser Arg Cys His Phe Ile His
 50 55 60

<210> 18
 <211> 64
 <212> PRT
 <213> Rattus norvegicus

<400> 18
 Arg Tyr Lys Thr Glu Leu Cys Arg Thr Tyr Ser Glu Ser Gly Arg Cys
 1 5 10 15
 Arg Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Pro Gly Glu Leu Arg
 20 25 30
 Gln Ala Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser Arg Cys His Phe Ile His
 50 55 60

<210> 19
 <211> 64
 <212> PRT
 <213> Xenopus laevis

<400> 19
 Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe Ser Glu Thr Gly Thr Cys
 1 5 10 15
 Lys Tyr Gly Ala Lys Cys Gln Phe Ala His Gly Lys Ile Glu Leu Arg
 20 25 30
 Glu Pro Asn Arg His Pro Lys Tyr Lys Thr Glu Leu Cys His Lys Phe
 35 40 45
 Tyr Leu Tyr Gly Glu Cys Pro Tyr Gly Ser Arg Cys Asn Phe Ile His
 50 55 60

<210> 20
 <211> 64
 <212> PRT
 <213> Cyprinus carpio

<400> 20
 Arg Tyr Lys Thr Glu Leu Cys Ser Arg Tyr Ala Glu Thr Gly Thr Cys
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 Lys Tyr Ala Glu Arg Cys Gln Phe Ala His Gly Leu His Asp Leu His
 20 25 30
 Val Pro Ser Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Tyr
 35 40 45
 His Thr Ala Gly Tyr Cys Val Tyr Gly Thr Arg Cys Leu Phe Val His
 50 55 60

<210> 21
 <211> 64
 <212> PRT
 <213> Danio rerio

<400> 21
 Arg Tyr Lys Thr Glu Leu Cys Ser Arg Tyr Ala Glu Thr Gly Thr Cys
 1 5 10 15
 Lys Tyr Ala Glu Arg Cys Gln Phe Ala His Gly Leu His Asp Leu His
 20 25 30
 Val Pro Ser Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr Tyr
 35 40 45
 His Asn Ala Gly Tyr Cys Val Tyr Val Thr Arg Cys Leu Phe Val His
 50 55 60

<210> 22
 <211> 64
 <212> PRT
 <213> Xenopus laevis

<400> 22
 Arg Tyr Lys Thr Glu Leu Cys Ser Arg Tyr Ala Glu Ser Gly Phe Cys
 1 5 10 15
 Ala Tyr Arg Asn Arg Cys Gln Phe Ala His Gly Leu Ser Glu Leu Arg
 20 25 30
 Pro Pro Val Gln His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Ser Phe
 35 40 45
 His Val Leu Gly Thr Cys Asn Tyr Gly Leu Arg Cys Leu Phe Ile His
 50 55 60

<210> 23
 <211> 77
 <212> PRT
 <213> Homo sapiens

<400> 23
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 1 5 10 15
 Ser Glu Ser Gly Arg Cys Arg Tyr Gly Ala Lys Cys Gln Phe Ala His
 20 25 30
 Gly Leu Gly Glu Leu Arg Gln Ala Asn Arg His Pro Lys Tyr Lys Thr
 35 40 45
 Glu Leu Cys His Lys Phe Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser
 50 55 60
 Arg Cys His Phe Ile His Asn Pro Ser Glu Asp Leu Ala
 65 70 75

<210> 24
 <211> 241
 <212> RNA
 <213> Mus musculus

<400> 24
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 agacucuucc cugaggugca augcacagcc uuccucacag agccagcccc ccucuauuuu 180
 uauuugcacu uauuauuuau uauuuauuuu uuauuuauuu auuugcuuau gaauguauuu 240
 a 241

<210> 25
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 <212> RNA
 <213> Mus musculus

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 aauguauuuu 70

 <210> 26
 <211> 6
 <212> PRT
 <213> Homo sapiens

 <400> 26
 Arg Tyr Lys Thr Glu Leu
 1 5

 <210> 27
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 <212> PRT
 <213> Homo sapiens

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 <223> Xaa can be Arg or Lys

 <400> 27
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 <211> 27
 <212> DNA
 <213> Mus Musculus

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 <212> DNA
 <213> Homo sapiens

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 <210> 31
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<213> Homo sapiens

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<210> 32
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<213> Mus musculus

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<210> 33
<211> 29
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<213> Mus musculus

<400> 33
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<210> 34
<211> 20
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<213> Mus musculus

<400> 34
gataagatct caggccttcc 20

<210> 35
<211> 27
<212> DNA
<213> Mus musculus

<400> 35
gccttctaga taaatacatt cataagc 27

<210> 36
<211> 27
<212> DNA
<213> Homo sapiens

<400> 36
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<210> 37
<211> 29
<212> DNA
<213> Homo sapiens

<400> 37
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<210> 38
<211> 30
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<213> Mus musculus

<400> 38
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<210> 39
 <211> 27
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 <213> Mus musculus

<400> 39
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27

<210> 40
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 40
 Lys Tyr Lys Thr Glu Leu
 1 5

<210> 41
 <211> 24
 <212> RNA
 <213> Mus musculus

<400> 41
 uuauuuuuuu auuauuuuuu uauu

24

<210> 42
 <211> 7
 <212> PRT
 <213> Homo sapiens

<400> 42
 Arg Tyr Lys Thr Glu Leu Cys
 1 5

<210> 43
 <211> 6
 <212> PRT
 <213> Homo sapiens

<400> 43
 Cys Gln Phe Ala His Gly
 1 5

<210> 44
 <211> 9
 <212> PRT
 <213> Homo sapiens

<400> 44
 His Pro Lys Tyr Lys Thr Glu Leu Cys
 1 5

<210> 45
 <211> 24
 <212> RNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence; note = synthetic construct

<400> 45

uuguuuuuuu guuguuuuuuu uuuu

24

<210> 46

<211> 22

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; note =
synthetic construct

<220>

<221> VARIANT

<222> 2-9, 11, 13, 16, 19, 21

<223> Xaa = any amino acid

<220>

<221> VARIANT

<222> 17

<223> Xaa can be Arg or Lys

<400> 46

Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Gly	Xaa	Cys	Xaa	Tyr	Gly	Xaa
1				5					10					15	
Xaa	Cys	Xaa	Phe	Xaa	His										
			20												

<210> 47

<211> 20

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; note =
synthetic construct

<220>

<221> VARIANT

<222> 2-9, 11-15, 17-19

<223> Xaa = any amino acid

<400> 47

Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Xaa	Cys	Xaa	Xaa	Xaa	Xaa	Xaa	Cys
1					5					10					15	
Xaa	Xaa	Xaa	His													
			20													

<210> 48

<211> 4

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence; note =
synthetic construct

<400> 48

Cys	Cys	Cys	His
1			